

R E M A R K S

Applicant has amended claims 1, 10, 15 and 16 to improve the form of the claims and to clearly distinguish the invention over the cited prior art. It is respectfully submitted that claims 1-8 and 10-16 are now in condition for allowance.

Applicant is submitting in duplicate a drawing of FIG. 1 marked as prior art, as requested by the Examiner.

Applicant has amended claim 1 to recite a method of generating power from a gas distribution network. The gas distribution network is comprised of a high pressure gas reservoir and a low pressure gas delivery pipeline. The method of generating power includes the step of directing at least a portion of the gas flowing between the high pressure reservoir and a low pressure delivery pipeline through a line free of a heat exchange member, driven by a thermal machine, to a satellite assembly to generate power. Importantly, the satellite assembly generates power without the combustion of gas.

The unique and novel method of generating power in accordance with the present invention provides an economical method of generating power which utilizes at least a portion of the flow of gas between a high pressure reservoir to a low pressure reservoir or pipeline without the combustion of the gas. For example, such a situation occurs when the gas is transferred from a high pressure line to a low pressure delivery line directed to the consumer. Conventionally, in the gas transmission industry the gas under high pressure is transferred

from a high pressure line to a low pressure line, with the resultant loss of pressure during this operation. The present invention utilizes a portion of gas flow from the high pressure line to the low pressure line to be directed through the satellite assembly or expander to provide power. Accordingly, the power provided in the present invention does not result from the combustion of any gases, a method which provides an environmentally safe method of generating power as well as an economical method of generating power which utilizes a portion of the gas flow to generate power.

The Examiner has rejected the claims 1-8 and 1-16 as being either anticipated or obvious over European Patent Publication 0 004 398. For the Examiner's consideration, applicant is submitting a complete translation of this European Publication which clearly teaches that the European '398 applicant must operate "a heat exchange member" driven by a combustion machine in the line before entering the turbine, which is referred to in the publication as "a thermal machine." This thermal machine, for example, could be an internal combustion machine, a gas turbine driving an electric current generator, diesel engines or the like. Thus, it is crystal clear from a reading of this prior art patent that a heat exchanger W is required which is "fed the heat losses of the thermal machine M." Accordingly, the '398 patent teaches that the generation of power is the result of the combustion of a gas, contrary to the present claimed invention.

Also, the '398 patent teaching is environmentally unsound because the thermal machines exhaust to atmosphere the combustion gases from the thermal machine. Plainly, such a condition and end result is eliminated by the novel method and assembly of the present invention. Accordingly, the '398 patent requirement of a heat exchanger member coupled to a combustion engine (thermal machine) to assist the distribution system for pressurized natural gas is not a teaching of the present invention. Such a teaching is simply antithetical to the express teachings and claims of the present invention. The claimed method includes the step of directing a portion of the high pressure gas being transferred between the reservoir and delivery pipelines be directed through a line which is free of a heat exchange member driven by a thermal machine. The satellite assembly, receiving this gas, does not combust gas to generate power. Thus, it is simply not seen how the '398 patent teaching remotely renders obvious or anticipates the present claimed invention.

To further understand the insufficiencies of the '398 teaching, the '398 patent teaches that by increasing thermal losses from thermal machines and by recovering those losses in a heat exchanger. A better method is to not have those losses occur in the first place. Thus, the application of heat exchangers and internal combustion engines which utilize compression and their low level temperature losses renders the

'398 teaching as untenable. Also, the '398 patent does not teach or suggest, in any manner, the generation of power in the absence of combustion, as required by the present claimed invention.

Applicant has amended also claim 10 to recite a satellite assembly for generating electrical power structurally associated with a gas distribution network having a first reservoir of gas at a pressure greater than the gas within a second delivery pipeline. The satellite assembly utilizes a portion of the gas flowing between the reservoir and delivery pipeline. The satellite assembly includes a conduit means, free of a heat exchange member driven by a thermal machine, connected to the gas flow between the reservoir and pipeline, an expander, a shaft, an electrical generator operatively associated with the shaft which produces electrical power without the combustion of gas, and control means for operating the satellite assembly.

For each and all of the reasons set forth above with respect to the distinguishing features of the present invention over the '398 patent, it is respectfully submitted that claim 10 is in condition for allowance.

Claims 2-8 are dependent from claim 1 and claims 11-16 are dependent from claim 10. It is respectfully submitted that each of these claims are in condition for allowance because the underline independent claims are clearly allowable over the reference of record.

At the present time, applicant has not amended the drawings to include the subject matter of claims 17-19 since those claims have been withdrawn from consideration because of the earlier election and restriction requirements placed upon applicant by the Examiner. The Applicant has provisionally elected to prosecute claims 1-8 and claims 10-16, as noted in paragraph 2 of the election/restriction portion of the Examiner's detailed action.

It is respectfully submitted that claims 1-8 and 10-16 are in condition for allowance.

Respectfully submitted,

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